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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,737	08/28/2003	Hisayuki Kato	67161-088	5698

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McDermott, Will & Emery
600 13th Street, N.W.
Washington, DC 20005-3096

EXAMINER

PRENTY, MARK V

ART UNIT	PAPER NUMBER
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2822

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,737

Applicant(s)

KATO, HISAYUKI

Examiner

MARK PRENTY

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,8,9,12,13 and 17-28 is/are pending in the application.
4a) Of the above claim(s) 17-25 is/are withdrawn from consideration.
5) ☒ Claim(s) 6,8,27 and 28 is/are allowed.
6) ☒ Claim(s) 9,12,13 and 26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

This Office Action is in response to the amendment filed on January 31, 2006.

Claims 17-25 are withdrawn from consideration as being directed to a non-elected invention.

Claims 26, 9, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent 6,667,533 to Daubenspeck et al. (Daubenspeck).

As to independent claim 26, Daubenspeck discloses (see the entire patent, including the Figs. 1-10 disclosure, for example) a semiconductor device formed on a substrate 105, comprising: an interconnection line 120 formed on the substrate and provided to structure a prescribed circuit; and a fuse 195 incorporated into said interconnection line; and a passivation film 220 covering said fuse, said passivation film having a flat surface, wherein said fuse and a connection portion of said interconnection line electrically connected to the fuse being formed of different metals (i.e., copper and aluminum, respectively – see column 5, line 25, and column 3, lines 31-33), and said fuse is formed of a copper metal formed in a damascene process and planarized by a CMP (Chemical Mechanical Polishing) process (see the Figs. 5-9 disclosure).

Claim 26 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Daubenspeck.

As to dependent claim 9, Daubenspeck's fuse 195 is formed from at least two portions 210 and 215 different in width (see the Fig. 12 disclosure, for example).

Claim 9 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Daubenspeck.

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As to dependent claim 12, an oxidation speed of the (copper) metal forming Daubenspeck's fuse 195 is faster than an oxidation speed of the (aluminum) metal forming the connection portion of Daubenspeck's interconnection line 120.

Claim 12 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Daubenspeck.

As to dependent claim 13, Daubenspeck's fuse 195 is formed of a copper metal (see column 5, line 25), and the connection portion of Daubenspeck's interconnection line 120 is formed of an aluminum metal (see column 3, lines 31-33).

Claim 13 is thus rejected under 35 U.S.C. 102(e) as being anticipated by Daubenspeck.

Claims 6, 8, 27 and 28 are allowable over the prior art of record.

The applicant's arguments are moot in view of the new ground of rejection.


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Registered practitioners can telephone the examiner at (571) 272-1843. Any voicemail message left for the examiner must include the name and registration number of the registered practitioner calling, and the Application/Control (Serial) Number. Technology Center 2800's general telephone number is (571) 272-2800.


Mark V. Prenty
Primary Examiner